October 5.

The President, Dr. Leidy, in the chair.

Twenty-four persons present.

A paper, entitled "Observations on Multiplication in Amœbæ," by Lillie E. Holman, was presented for publication.

October 12.

Mr. Chas. Morris in the chair.

Twenty-two persons present.

Notes on the Lichens in the Herbarium of the Academy.—At a meeting of the Botanical Section, held October 11, Dr. J. W. Eckfeldt, to whom had been committed the task of examining and arranging the Lichens in possession of the Academy, reported the result of his work, which had extended over two years. Besides the collections upon the shelves, made by Schweinitz, and by him bequeathed to the Academy, and that received from the late Prof. Tuckerman, he had found stowed away among miscellaneous packages: 1st, a collection made by Thomas G. Lea, of North American species, many without names, or incorrectly named; 2d, a small collection made by H. W. Ravenel, chiefly from the vicinity of Aiken, or along the Santee Canal in South Carolina, in all about 60 to 70 species; 3d, a small collection of Arctic species made by Dr. Hayes; 4th, a small collection of European species made by Parmentier at a very early date; 5th, a set of Scotch Lichens from Mr. Manghen; and a few scattered species from various American collectors. To each of these collections he had given a careful microscopic examination, and had named and classified them on the basis of Prof. Tuckerman's Genera Lichenum. He had also added to these from his own private herbarium more than 400 species, both North American and foreign. All these collections had been incorporated in one, and occupy one of the cases in the lower room, as a nucleus for the Academy's general collection of Lichens.

For obvious reasons it had been deemed advisable to maintain apart and undisturbed the type collections of Schweinitz and Tuckerman, but a general catalogue has been prepared including all, by which proper reference to the contents of each is facilitated. He had, moreover, gone carefully through the Schweinitzian collection, and, while leaving the original names unchanged, had indicated upon the outside of each packet such changes as are required by the present state of knowledge.

The total number of species of Lichens now in the Academy's

Herbarium is 736. In the general collection are 570 species, and in the Schweinitzian are 462. The general collection contains 244 species not found in the Schweinitzian, and the latter has 282 species not found in the former. In all, 65 genera are well represented.

In regard to the Schweinitzian collection he remarked that the same species often there appeared under several names, being simply in different stages of development. Genera too were founded upon juvenescent stages or gonidial conditions which, from the time of Acharius to that of Schweinitz and later, were considered sufficient to establish generic distinctions. For example, such genera as *Leparia*, *Isidium* and *Byssus*, were then deemed valid, but are now considered to be, some of them young and irioid states of plants mostly belonging to the section *Lecanora*; others, sterile states of *Omphalaria*, *Cænogonia*, or other Collematous Lichens.

He spoke of several rare and interesting specimens in the collection. Of these, in the Schweinitz Herbarium, is a crustaceous Lichen found in 1812 at Salem, N. C., on a granitic rock, and called by the collector *Gyalecta candida*, and by this name known only to a few up to the year 1866. At this period Prof. Tuckerman described the plant in an Appendix to his Lichens of California as *Opegrapha ontocheila*, thus placing it permanently in a well-established genus of gymnocarpous Lichens. This specimen was the only one known until 1885 when Mr. Green found upon high projecting schist rocks along the Catawba River at Landsford, Chester Co., S. C., a lichen which was supposed to be new, until Prof. Tuckerman, just previous to his last illness, identified it with that found by Schweinitz as above. Dr. Eckfeldt also referred to a remarkable foliaceous Lichen found near Cincinnati by Mr. T. G. Lea in 1839, formerly known as *Parmelia Ohionis* (Lea, Catal. Pl. Cincinnati, p. 45), but since described by Tuckerman as *Physcia Leana*. So far as Dr. Eckfeldt was aware, this rare species had not since been found. He also referred to the difficulties encountered in the examination of much of the material, many of the types being old and fragile, having lost the parts most important for study, for want of proper care. Only a practiced eye, aided by constant use of the microscope, and by comparison with authentic specimens, can surely determine the doubtful and difficult forms present in this section of cryptogamic botany.

October 19.

The President, Dr. Leidy, in the chair.

Twenty-seven persons present.

A paper entitled "The Genera Mesonyx and Pachyæna Cope," by Wm. B. Scott, was presented for publication.